

ABSTRACT OF THE DISCLOSURE

A catalytic combustor contains multiple sections for catalytically combusting an anode effluent. The anode effluent is divided into a plurality of portions with each portion routed to a different section or stage of the combustor. The proportioning of the anode effluent allows the combustor to be operated so that the flows combusted do not autoignite and various heat loads placed on the different stages of the combustor can be met. Additionally, the proportioning of the anode effluent allows the temperature within the various components of the combustor to be controlled so that a useful life of the combustor can be increased.